

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 27 AUG 2004
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Applicant's or agent's file reference P17157-KDK	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/EP 03/05851	International filing date (day/month/year) 04.06.2003	Priority date (day/month/year) 04.06.2002
International Patent Classification (IPC) or both national classification and IPC H04Q7/24		

Applicant
TELEFONAKTIEBOLAGET LM ERICSSON (PUBL) et al.

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 6 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 19.12.2003	Date of completion of this report 30.08.2004
Name and mailing address of the International preliminary examining authority: European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Schut, G Telephone No. +31 70 340-4095



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/05851**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

2-12

as originally filed

1

received on 09.06.2004 with letter of 07.06.2004

Claims, Numbers

1-24

received on 09.06.2004 with letter of 07.06.2004

Drawings, Sheets

1/5-5/5

as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
~~citations and explanations supporting such statement~~**

1. Statement

Novelty (N)	Yes: Claims	1-24
	No: Claims	
Inventive step (IS)	Yes: Claims	1-24
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-24
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/05851

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: WO 01/15475 A (SIVAGNANASUNDARAM SUTHA ;ROBERTS MICHAEL (GB); PALAT SUDEEP KUMAR) 1 March 2001 (2001-03-01)

D2: "Digital cellular telecommunications system (Phase 2+) (GSM);Universal Mobile Telecommunications System (UMTS); Network architecture (3GPP TS 23.002 version 4.3.0 Release 4)" ETSI TS 123 002 V4.3.0, XX, XX, June 2001 (2001-06), pages 1-42, XP002200605

D3: EP-A-1 182 900 (LUCENT TECHNOLOGIES INC) 27 February 2002 (2002-02-27)

D4: WO 01/13657 A (ERICSSON TELEFON AB L M) 22 February 2001 (2001-02-22)

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to this document):

"A method for operating a switching node (226) of a communication network, comprising the steps of

- receiving communication request,
- processing the communication request (page 7, lines 7-26)"

The subject-matter of claim 1 differs from this known method in that the method comprises the further step of:

"determining an operation mode of the switching mode, wherein the determined operation mode indicates whether the switching node is operatively for the processing of the requested communication service part of a layered architectural environment providing a user plane layer for user data and a control plane layer for signalling data, or part of a non-layered architectural environment not providing a split between a user plane and a control plane, and wherein the processing of the requested communications service comprises the operating of the switching node in the determined operation mode."

The subject-matter of **claim 1** is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as to provide a

switching node for both layered and non-layered architectural environments.

The solution to this problem proposed in **claim 1** of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons: D1 discloses a 3G switching node connected to both a 2G and 3G radio access network, but remains silent on whether the switching node can operate in both layered and non-layered architectural environments.

D2 and D4 disclose layered architectural environments providing a user plane layer for user data and a control plane layer for signalling data, but are silent about switching between layered and non-layered operating modes.

D3 discloses a switching node with separate bearer and control paths, but is also silent about switching between layered and non-layered operating modes.

Thus even the combination of any of the cited documents would not lead to the claimed subject-matter.

Consequently, **claim 1** meets the requirements of Article 33(2) and (3) PCT.

Claims 2-18 and 23-24 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Claim 19 defines substantially the same features as claim 1 in terms of features of a node. Thus the same reasoning also applies to claim 19. Therefore claim 19 also meets the requirements of Article 33(2) and (3) PCT.

Claims 20-21 are dependent on claim 19 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Claim 22 defines substantially the same features as claim 1 in terms of features of a system. Thus the same reasoning also applies to claim 22. Therefore claim 22 also meets the requirements of Article 33(2) and (3) PCT.